

ANTIBIOTIC-METAL COMPLEXES IN THE DETECTION OF
GRAM-POSITIVE BACTERIA AND OTHER BIOLOGICAL ANALYTES

ABSTRACT OF THE DISCLOSURE

Complexes of antibiotics and metals are provided that are useful in detecting microorganisms, including gram-positive bacteria, Mycobacteria, permeabilized gram-negative bacteria, protozoans and other biological analytes, and are particularly useful in detecting gram-positive bacteria. The complexes are preferably chelated complexes wherein the antibiotic is a glycopeptide antibiotic, quinolone antibiotic, ribonucleoside antibiotic, mixtures thereof, and analogs and derivatives thereof, and (b) a detectable label comprising a transition or lanthanide metal. The complexes provide for chemiluminescent, fluorescent or magnetic detection of the analyte. Methods of synthesizing and using the complexes are also provided.